DOCUMENT RESUME

ED 241 861 CG 017 339

AUTHOR Heinemann, Allen; And Others
TITLE The Role of Hope in Spinal Cord Injury Rehabilitation.
PUB DATE 27 Aug 83
NOTE 15p.; Paper presented at the Annual Convention of the American Psychological Association (91st, Anaheim, CA, August 26-30, 1983).
PUB TYPE Information Analyses (070) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adaptive Behavior (of Disabled); *Coping; Counselor Role; Disabilities; Emotional Response; Expectation; Health Personnel; Physiology; Prognostic Tests; *Psychological Needs; Psychological Patterns; *Rehabilitation
IDENTIFIERS Acceptance; *Hope; *Spinal Cord Injuries

ABSTRACT

Hope has motivational importance to individuals who have suffered a major physical loss. Theories of adjustment to a spinal cord injury take one of three approaches: (1) premorbid personality, which highlights the individual's past experiences, personal meanings, and body image; (2) typologies of injury reactions, which range from normal to psychotic; and (3) stage models of adjustment, characterized by movement from denial to depression to anger to acceptance. In rehabilitation a curvilinear relationship between hope and acceptance exists in that extremely high and extremely low levels of hope impede acceptance. Reality-oriented clients who possess moderate levels of hope report more positive rehabilitation outcomes. The role the professional should assume in balancing the client's hope and expectations remains an individual decision based on the client's emotional response and psychological needs. At the Pritzker Institute in Chicago, where studies in the use of functional electrical stimulation (FES) in aiding paraplegic persons to stand and ambulate are being conducted, careful candidate screening and interviewing assess the client's hope and expectations before treatment. To achieve a balance between hope and reality, each client should be assessed from a familial, economic, vocational, psychological, social, and intellectual perspective. (BL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED241861

THE ROLE OF HOPE IN SPINAL CORD INJURY REHABILITATION

Allen Heinemann

Chrisann Schiro Geist

Renee Magiera-Planey

Illinois Institute of Technology

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Allen Heinemann

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

This paper was presented during a poster session at the American Psychological Association Convention in Anaheim, California, on August 27, 1983.

CG 017 339

ABSTRACT

This paper examines the role of hope during rehabilitation by focusing on the experience of paraplegic persons who participate in research utilizing electrical stimulation to achieve stance and to ambulate. Also examined is the effect hope has on individuals' adjustment following disability and possible interventions to achieve a balance between hope and reality and to minimize false expectations.

The Role of Hope in Spinal Cord Injury Rehabilitation

The English poet Alexander Pope succinctly noted a human tendency when he wrote "Hope springs eternal in the human breast." There are few situations where one does not hope for the optimal outcome. Health care professionals see this phenomenon when working with individuals who have incurred a disability. The professional is faced with attempts to achieve a balance between the individual's hope for recovery and professional experience that suggests residual deficits may remain even after rehabilitation.

Advances in medicine and rehabilitation engineering affect hopes for recovery for persons with physical disabilities by promoting the perception that solutions to functional limitations will soon be developed. Research programs utilizing functional electrical stimulation (FES) demonstrate the potential for paraplegic individuals to stand and ambulate. Research to develop a system that is available to paraplegic individuals is continuing.

HOPE AND ITS IMPLICATIONS

Morris (1980) defined hope as a wish for something with some expectation. It is a reasonable assumption that hope is a potent antidote to the depression that often follows a major physical loss (Dembo, Leviton & Wright, 1956). The motivational importance of hope was similarly described by Mowrer (1960) and Tolman (1948) who argued that expectancy of goal achievement is necessary for the organism to "behave." Difficulty arises when a high level of hope exists. Ittleson (1952) discussed the implications of expectations one carries into situations and how these expectations affect the interpretation of phenomena. Baller and Charles (1961)

summarized the issue by stating that people see things in accordance with their present needs and past experiences. This is consistent with Kelly's (1955) notion of behavioral consistency between past, present and anticipated future experience.

A major concern of health care professionals is knowing when to intervene to align a person's hopes and expectations regarding outcomes of a rehabilitation treatment program with professional experience. Dembo, Leviton & Wright (1956) state that it is best to support hope; Wright (1960) is more cautious maintaining that hope built upon evasion is hardly reassuring, although coating reality with hope does not mean living in a world of unreality. Accepting a disability does not mean abandoning hope.

ADJUSTMENT AND ACCEPTANCE FOLLOWING SPINAL CORD INJURY

Many theories of adjustment following spinal cord injury (SCI) exist. These theories take one of three approaches in dealing with the process of adjustment.

Premorbid Personality: Woodbury (1978) highlights the importance of an individual's premorbid personality for post injury adjustment. It is commonly accepted that as a consequence of past experiences individuals have their own meanings and interpretations of disability (Litlin, 1957; Shontz, 1975).

An individual's body image is also a factor that provides information as to how the individual will adjust. One's body image reflects how we see ourselves in relation to our world and hence reflects our style of life (Fischer & Cleveland, 1958). Mitchell's research (1970) demonstrates that there are changes in bodily perceptions that accompany

chronic illness and disability. These are due partially to sensory and social isolation and restricted mobility that interfer with the perception and integration of body information. Once this information is processed individuals begin to change their body images. Both cognitive and emotional acceptance of a disability are necessary before the body image is reorganized.

Typologies of injury reactions: The second major approach to a understanding of adjustment has been to describe typologies of reactions to injury. Nagler (1950) was the first to offer a reactive typology. He outlined several different types of reactions ranging from a normal to a psychotic reaction. Mueller (1962) and Knorr & Bull (1970) offered typologies that vary in complexity. These typologies include more negative reactions than stage models of adjustment described below.

Stage models of adjustment: The final approach explaining adjustment is based on various stages. Dunn (1978) asserted that the individual who experiences a traumatic injury goes through a series of stages similar to those of dying persons (Kubler-Ross, 1969; Wright, 1960). Emotional reactions may vascilate between stages during the course of a day. Feld (1961) and Hohmann (1975) present stage models consisting of denial, depression characterized by withdrawal, depression characterized by externalized hostility, reaction against dependency and finally a reconstitution of pretraumatic personality or acceptance. Falek & Britton (1974) describe a coping sequence of four stages: shock and denial, anxiety, anger and/or guilt and depression.

Depression has been traditionally viewed as a necessary component of adjustment and acceptance to a traumatic injury (Guttman, 1946; Litlin,

1957; Thom, von Salzen & Fromme, 1946). The absence of depression has been equated with denial (Cook, 1976; Dinardo, 1971). Dinardo (1971) argues that depression may not be a necessary component of the acceptance process. Observer reported denial may be regarded as selective attention, an emotional response style, rather than an ego defense process. This perspective highlights the strong influence of premorbid personality.

Social pressures also influence the acceptance process. Orfirer (1970) believes that the public and friends encourage denial by urging an individual not to think of losses and to make false promises that recovery will occur. Blacher (1970) reports that members of the medical community frequently encourage such denial. Lindemann & Adams (1974) support this finding and report a case where such an incident created false hopes of recovery that severely retarded the rehabilitation process.

The existence of stages of adjustment was disputed by Trieschmann (1978) who suggested that there is little evidence to support such a model. However, clinical experience and the existing literature suggests that stages of change do occur.

MODIFICATION AND MONITORING OF HOPE

A curvilinear relationship between hope and acceptance of disability has been examined by several investigators (Hohmann, 1975; Roessler & Boone, 1978; Roessler, Boone & Cooper, 1978). Uhlig and Stevic (1967) report that extremely pessimistic and optimistic clients find failure in rehabilitation while realistically oriented clients are successful in their efforts. They found that high and low levels of hope do not facilitate acceptance of disability. Roessler & Boone

(1978) found that clients with high levels of hope did not have as high a completion rate in their rehabilitation programs as those who reported more moderate levels of hope. It appears that moderate levels of hope are apt to be more conducive of positive outcomes.

The question remains, how does the health care professional and researcher attempt to monitor and modify a disabled individual's hope and expectations of the rehabilitation process? There is little agreement as to the kind of intervention that the professional can or should provide. No standard guidelines exist for professionals to follow in the treatment of disabled persons who express high hopes of recovery or benefits from research. Attempts to assist disabled persons are affected by emotional responses to various situations, adjustment and degree of disability acceptance. If indeed the stage theories are valid, the timing of interventions is critical. The clinician must consider each person's readiness to relinquish a previously held self-concept that includes an able-bodied image. The clinician can encourage acceptance of change. Just as the individual has a right to accurate medical information and likely outcomes, health care professionals dealing with families need to examine their hopes for the recovery of the patient and the restoration of the family to status quo.

Finally, it is essential that the reaction of the individual be evaluated. A person demonstrating psychotic symptoms needs time to work through his or her loss. It is important that escape tendencies go unrewarded. The individual needs to be supported and encouraged to perform relevant tasks and to establish goals. Once some level of independence is achieved additional goals can be developed. What is

essential is not to comfort the person by telling him/her that everything will be all right. This only encourages denial of the consequences of the disability. As a result, both are able to observe the person's performance. The mutual creation of goals serves as a way of monitoring hope.

While research investigating hope typically examines counseling components of the rehabilitation process, there is little research conducted on hope in physiological research utilizing new technology. Much media coverage has been given to studies of functional electrical stimulation (FES) that allows paraplegic persons to stand and walk. Letters from individuals as far away as New Zealand are received by the Pritzker Institute in Chicago. Many persons are eager to volunteer because they view this technology as a chance for cure. They are hopeful of recovering functional autonomy and restoring their preinjury lifestyle. Because the number of openings is limited, subjects are carefully screened. A complete case history is obtained from each candidate, information concerning the technological and psychological aspects of the program is provided, and the psychological status of the candidate is assessed during an interview and through a test battery composed of the Wide Range Achievement Test reading subtest (Jastak & Jastak, 1978) to examine the comprehension of written and oral material; the Shipley Institute of Living Scale (Paulson & Lin, 1970) to estimate intellectual functioning; the Acceptance of Disability Scale (Linkowski, 1971) to assess self-attitudes; the Minnesota Multiphasic Personality Inventory (Dahlstrom, Welsh & Dahlstrom, 1972) to identify thought process disorders; and the Beck Depression Inventory (Beck, 1967) to assess the degree of depression.

In the initial interview the issue of hopes and expectations are raised. The candidates are questioned about their perceptions of the research, what they perceive outcomes of participation in this program to be, and expected benefits and costs resulting from participation. Their disability and the manner in which it has affected their life is carefully investigated as are attitudes of their families. It is paramount that the candidates and their families understand that benefits may be limited and cannot be guaranteed. Continued monitoring of perceptions are made at six month intervals. This allows researchers and subjects to examine possible changes in outcome expectations.

IMPLICATIONS

This careful screening and intensive interviewing provides realistic information that may modify participants' level of hope and expectations of research outcomes. We believe that these procedures can be applied in other research projects to help participants establish a realistic outlook.

Recommendations for achieving and maintaining a balance between hope and reality include:

1. Examine the familial, rehabilitation, employment and social history of each individual.
2. Examine the psychosocial resources of each individual to deal with stress and uncertainty.
3. Obtain permission to examine information about the rehabilitation process of each individual.
4. Examine the intellectual and emotional acceptance of the disability achieved by each participant via testing and interviews.

5. Examine the number of goals expressed through interviews.

While there is no exact formula for weighting these factors to predict successful research outcome, an examination of these factors by health care professionals and researchers will indicate the individual's ability to balance objective information with a desire for improved functioning.

REFERENCES

Baller, W. & Charles, D. The psychology of human growth and development. New York: Holt, Reinhart and Winston, 1961.

Beck, A. Depression: Causes and treatment. Philadelphia: University of Pennsylvania Press, 1967.

Blacner, R. Reaction to chronic illness. In B. Schoenberg, A. Carr, D. Peretz & A. Kutscher (Eds.) Loss & grief: Psychological management in medical practice. New York: Columbia University Press, 1970.

Cook, D. Psychological aspects of spinal cord injury. Rehabilitation Counseling Bulletin, 1976, 19, 535-543.

Dahlstrom, W., Welsh, G. & Dahlstrom, L. An MMPI handbook (Vols. 1 & 2) Minneapolis: University of Minnesota Press, 1972.

Dembo, T., Leviton, L. & Wright, B. Adjustment to misfortune - A problem of social psychological rehabilitation. Artificial Limbs, 1956, 3, 4-62.

Dinardo, Q. Psychological adjustment to spinal cord injury. (Doctoral dissertation, University of Houston, 1971). Dissertation Abstracts International, 1971, 32, 4206B-4207B.

Dunn, M. Psychological intervention in a spinal cord injury center: An introduction. Rehabilitation Psychology, 1978, 22, 165-178.

Falek, A. & Britton, S. Phases in coping: The hypothesis and its implications. Social Biology, 1974, 21, 1-7.

Feld, M. Psychiatric-psychological survey of 1,000 cases of spinal cord injury. In United States Veteran's Administration: Proceedings of the Ninth Annual Clinical SCI Conference. United States Government Printing Office, Washington, D.C.: 1961.

Fischer, S. & Cleveland, S. Body image and personality. Princeton N.J.: D Van Nostrand Co., 1958.

Guttman, L. Rehabilitation after injuries to spinal cord and cauda equina. British Journal of Physical Medicine, 1946, 9, 130-137.

Hohmann, G. The insider outsider position and the maintenance of hope. Rehabilitation Psychology, 1975, 22, 136-141.

Jastak, J. & Jastak, S. The wide range achievement test manual of instructions. Wilmington, DE: Jastak Associates, 1978.

Ittleson, W. The involuntary bet. Vogue, 1952, 76-77.

Kelly, G. A theory of personality: The psychology of personal constructs. New York: Norton, 1955.

Knorr, N. & Bull, J. Spinal cord injury: Psychiatric considerations. Maryland State Medical Journal, 1970, 19, 105-108.

Kubler-Ross, E. On death and dying. New York: Macmillan, 1969.

Lindemann, E. & Adams, J. Coping with a long term disability. In G. Coelho, D. Hamburg, & J. Adams (Eds.) Coping & adaptation. New York: Basic Books, 1974.

Linkowski, D. A scale to measure acceptance of disability. Rehabilitation Counseling Bulletin, 1971, 4, 236-244.

Litlin, E. Emotional aspects of chronic physical disability. Archives of Physical Medicine and Rehabilitation, 1957, 38, 139-142.

Mitchell, K. The body image variable and level of adjustment to stress irduced by severe physical disability. Journal of Clinical Psychology, 1970, 26, 49-52.

Morris, W. (Ed.) The American heritage dictionary of the English language. Boston: Houghton Mifflin Co., 1980.

Mowrer, O. Learning theory and behavior. New York: Wiley, 1960.

Mueller, A. Psychologic factors in rehabilitation of paraplegic patients. Archives of Physical Medicine and Rehabilitation, 1962, 43, 151-159.

Nagler, B. Psychiatric aspects of cord injury. American Journal of Psychiatry, July 1950, 107, 49-56.

Orfirer, A. Loss of sexual function in the male. In B. Schoenberg, A. Carr, D. Peretz & A. Kutscher (Eds.) Loss and grief: Psychological management in medical practice. New York: Columbia University Press, 1970.

Paulson, M. & Lin, T. Predicting WAIS IQ from Shipley-Hartford scores. Journal of Clinical Psychology, 1970, 26, 453-461.

Roessler, R. & Boone, S. The paradox of hope for individuals with a disability. Psychosocial Rehabilitation Journal, 1978, 2, 1-8.

Roessler, R., Boone, S. & Cooper, P. Hope and manifest anxiety: Motivational dynamics of acceptance of disability. Journal of Counseling Psychology, 1978, 25, 551-556.

Shontz, F. The psychosocial aspects of physical illness and disability. New York: MacMillan, 1975.

Thom., Von Salzen, C. & Fromme, A. Symposium on problems on postwar medicine: Psychological aspects of paraplegic patients. In Mueller, A. Psychological factors in rehabilitation of paraplegic patients. Archives of Physical Medicine and Rehabilitation, 1957, 38, 143-147.

Tolman, E. Cognitive maps in rats and men. Psychological Review, 1948, 55, 189-209.

Trieschmann, R. Psychological, social and vocational adjustment in spinal cord injury. Rehabilitation Psychology, 1978, 3, 165-175.

Uhlig, G. & Stevic, R. Client expectations of the rehabilitation process. Rehabilitation Counseling Bulletin, 1967, 10, 112-117.

Woodbury, B. Psychological adjustment to spinal cord injury: A literature review, 1950-1977. Rehabilitation Psychology, 1978, 25, 119-134.

Wright, B. Physical disability: A psychological approach. New York: Harper, 1960.